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| EXAMINER | |
|---|---|
| SILVER, DAVID | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2128 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/627,977 | WOZNIAK, ANDRZEJ | |
| | Examiner | Art Unit | |
| | DAVID SILVER | 2128 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *29 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *105-118 and 130-143* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *105-118 and 130-143* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/29/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

**DETAILED ACTION**

1. Claims 105-118 and 130-143 are currently pending in Instant Application.

2. The Instant Application is not currently in condition for allowance.

***Information Disclosure Statement***

3. The information disclosure statement(s) (IDS) submitted on Aug 29 2008 is/are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement(s) is/are being considered if signed and initialed by the examiner.

***Response to Arguments***

***Response: 35 U.S.C. § 101***

4. **Examiner Response:**

4.1 The 35 U.S.C. § 101 rejection has been withdrawn in view of Applicants' remarks.

***Response: 35 U.S.C. § 112***

5. **Examiner Response:**

5.1 Applicants are thanked for their detailed arguments as well as amendments to overcome the 35 U.S.C. § 112 rejections. Applicants' arguments and amendments have been fully considered and are persuasive. Accordingly, the 35 U.S.C. § 112 P1 rejections have been withdrawn, with exception of subsection 'g' (Remarks: page 22). Specifically, the term "incompatible", as argued by Applicants, means the components on either end of the connection are expecting different signals; however, such statements aren't supported by the Specification.

5.2 The 35 U.S.C. § 112 P2 rejections have been withdrawn in view of the remarks / amendments made.

***Response: 35 U.S.C. § 102***

6. **Applicants argue:**

6.1 "For example, the cited portion of Schubert is teaches computing "design instrumentation circuitry (DIC)" 106 which is "thereafter incorporated (e.g., added) into the electronic system to facilitate debugging." See Schubert, paras. [0135] and [0136]; and FIG. 1A. Schubert is not understood to teach or suggest automatically generating source code files comprising the simulation model

corresponding to the selected configuration specified by the configuration definition file, in which the simulation model comprises software simulation elements each corresponding to an integrated circuit which together comprise the design of a processing machine that conforms to a functional specification of the selected configuration as defined in the configuration definition file, as recited in Claims 105 and 130." (Remarks: page 27)

7. **Examiner Response:**

7.1 Attention is drawn to, for example, Fig 9 and its description which discloses a generic configurable circuitry and **(para [0091])** which discloses PLDs are being configurable. The PLDs are inherently configured in accordance with a configuration file (information stream), HDL file. Attention is further drawn to **(para [0275])** which discloses configuration (HDL) based on building blocks of ICs which together make up the total HDL. Accordingly, Applicants' arguments have been fully considered but are unpersuasive for the reasons set-forth above. Therefore, the rejection is maintained.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 108 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the **enablement requirement**. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The following features are not enabled such that one of ordinary skill in the art could make and use the invention without undue experimentation.

8.1 In claim 108, what makes a connection "incompatible"?

9. Claims not specifically mentioned are rejected by virtue of their dependency.

10. The Applicants are required to fix all other similar occurrences of the above-cited deficiencies.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 105-118 and 130-143 are rejected under 35 U.S.C. 102(e) as being anticipated by Schubert **(US 20030069724 A1)**.

As per claims 105-118, note the rejection of claims 130-143 below. The Instant Claims recite substantially same limitations as the below-rejected claims and are therefore rejected under same prior-art teachings.

Schubert discloses: 130. (New) A method for automatically generating a simulation model for a selected configuration of software simulation elements, comprising:

storing a plurality of said software simulation elements, said plurality of software simulation elements provided with inter working connections so as to constitute the simulation model of an architecture, each said software simulation element representing a component **(para 135, 142, 152, para 122)**;

creating a simulation of wiring by executing stored regular expressions **(para 122)**;

using the configuration definition file, a component and connection rule table, and a connection coherency rule table, wherein the component and connection rule table and the connection coherency rule table are written in a high level language, and the component and connection rule table describes properties of said software components for simulating at least one of the plurality of integrated circuits **(para 122, 135, 142, 152, 18, 93, 198, 227, 91, 275)**;

instantiating components based on a configuration definition file; and combining, via a high level language (HLL) code generator, the parameters of the components with the connection rules of the

component and connection rule table; **(para 85-84)**

automatically generating source code files comprising the simulation model corresponding to the selected configuration specified by the configuration definition file,

wherein the simulation model comprises software simulation elements each corresponding to an integrated circuit which together comprises the design of a processing machine that confirms to a functional specification of te selected configuration as defined in the configuration definition file **(para 91, 275, 122, 135, 142, 152, 18, 93, 198, 227)**.

Schubert discloses: 131. The method according to claim 130, wherein the components comprise Active Components, Monitoring and Verification Blocks, Intermediate Blocks, System Blocks, and Global Blocks **(para 15, 23, 122, 123, 138, 141, 146)**.

Schubert discloses: 132. The method according to claim 131, further comprising performing a conformity check of the connections by comparing an instance connection table with a table of coherency rules for the physical connections between the models chosen from the blocks to constitute the simulation model **(para 150, 163)**.

Schubert discloses: 133. The method according to claim 132, further comprising:

comparing the instance connection table to the connection coherency rule table to detect any incompatible connections between the ends of the connections between blocks **(para 150, 163)**; and

in cases where an incompatible connection is detected, specifying and adding an adapter component (Intermediate Block) to the instance connection table, said adapter component being inserted into the detected incompatible connection between the components **(para 150, 163, 10, 122)**.

Schubert discloses: 134. The method according to claim 133, wherein the component and connection rule table includes properties of the components and contains parameters common to all of the component types and exists in the form of a table distributed into one or more associative tables, and entries being names designating all possible models for the same component **(Fig 29 and description)**.

Schubert discloses: 135. The method according to claim 134, wherein the associative tables are adapted to contain a description either in the form of parameter sets or in the form of references to procedures

that generate a set of values, and wherein entries of the associative tables comprise names each of which designates a possible model for the same component, and form a character string containing predetermined special identifiers that are replaced by calculated values **(Fig 29 and description)**.

Schubert discloses: 136. The method according to claim 135, further comprising:

indicating, using at least three selectors, the instance to be used; and transmitting the following selectors as parameters to a constructor of an HLL object **(Fig 25 and description)**: a first selector indicating a current instance (item); a second selector specifying the current instance connected to an end of a port; and a third selector indicating a composite instance corresponding to an active Component containing an observation port **(Fig 29 and description)**.

Schubert discloses: 137. The method according to claim 130, further comprising:

representing, by one or more connection coherency rule tables, the rules for interconnecting the components and for inserting intermediate components; representing, by one or more component and connection rule tables, the system- level connection rules and the rules for generating connections between the signals; and representing, by one or more source file formatting tables, the rules for generating instances of HLL objects **(para 170)**.

Schubert discloses: 138. The method according to claim 130, further comprising:

uniquely identifying, via an HLL base class, each object instantiated; generating and automatically instantiating System Blocks; using tables to associate the signals connected together under a unique name of the connecting wires; and using a formatting table to generate the hardware description language and HLL source files **(para 21)**.

Schubert discloses: 139. The method according to claim 130, further comprising:

receiving, from an operator, a functional specification of the configuration in a high level language; and completing the functional specification with the components in a language other than said high level language **(para 88)**.

Schubert discloses: 140. The method according to claim 130, further comprising:

defining, using the following entries in a hash, a Component Type; and correlating, using the

following entries in the has, each Component Type to the hash, wherein said hash comprises the following: a first entry comprising a name of a hardware description language (HDL) module of a component and a name of a corresponding source file; and a second entry comprising a definition of a method for selecting the signals that are part of a Port, said definition comprising a set of entries indexed by a name of the Port; wherein said method further includes associating each said Port name with a table of regular expressions and a pointer to a signal connection procedure that controls the application of the expressions to the names of the signals of the interface of the component **(para 221, 409, 455)**.

Schubert discloses: 141. The method according to claim 140, wherein

said Component Type comprises one or more Active Components having a generic structure that includes a containing Block that contains an HDL Block including an HDL description and a Block in HLL that provides access paths to HDL resources and a description of the containing block in the high level language **(para 15, 92, 99)**;

wherein the set of signals of the HDL Block constitutes an interface of the containing Block, formed by one or more Ports, comprising arbitrary logical selections of signals of an interface, and also formed by interface adapters which provide, in each said Port, two-way communication between the high level language and hardware description language **(para 15, 92, 99)**.

Schubert discloses: 142. A method according to claim 141, further comprising specifying the Ports in the form of regular expressions that select subsets of signals to be connected and define connection rules **(para 15, 92, 99)**.

Schubert discloses: 143. A method according to claim 130, further comprising generating Transfer Components which are inserted to be operable at each side of an interface between servers, said Transfer Components comprising wires for inputs and registers for outputs **(para 15, 92, 99)**.

***Support for Amendments and Newly Added Claims***

Applicants are respectfully requested, in the event of an amendment to claims or submission of new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution. MPEP 714.02 recites:

"Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06. An amendment which does not comply with the provisions of 37 CFR 1.121(b), (c), (d), and (h) may be held not fully responsive. See MPEP § 714." **Amendments not pointing to specific support in the disclosure may be deemed as not complying with provisions of 37 C.F.R. 1.131(b), (c), (d), and (h) and therefore held not fully responsive.** Generic statements such as "Applicants believe no new matter has been introduced" may be deemed insufficient.

***Conclusion***

12. All claims are rejected.

13. The Instant Application is not currently in condition for allowance.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Silver whose telephone number is (571) 272-8634. The examiner can normally be reached on Monday thru Friday, 10am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128

/ DS /
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